



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

VIA ELECTRONIC TRANSMITTAL

September 15, 2016

Ms. Pamela S. Innis
CHF Remedial Project Manager
US Department of the Interior
Bureau of Land Management – Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona, 85004-4427

RCRA FACILITY INVESTIGATION – UNDESIGNATED AREA 1
PACIFIC GAS AND ELECTRIC COMPANY, TOPOCK COMPRESSOR
STATION, NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Dear Ms. Innis:

Over many years, the Department of Toxic Substances Control (DTSC) and the Department of the Interior (DOI) have collaboratively worked as co-lead environmental regulators at the Pacific Gas and Electric (PG&E) Company Topock Compressor Station in Needles, California. DTSC and DOI have effectively worked side-by-side in overseeing the ongoing investigation and remediation at the site. DTSC highly values DOI's involvement and looks forward to continuing our strong working relationship on this project.

During our recent soil investigation activities discussions, DTSC expressed its evaluation and position regarding the geophysical survey results for Undesignated Area 1 (UA-1), which is located on federal land outside of the PG&E property boundary. According to the 2006 Draft Part A RCRA Facility Investigation (RFI) Workplan and the 2007 Revised Final RFI Volume 1, Site Background Report, UA-1 was identified by a former PG&E employee as a potential burial location for 20-foot length asbestos-covered metal pipes. A 2008 geophysical survey of UA-1 detected several metallic anomalies. However, a plan to perform trenching activities was halted due to objections raised by Native American Tribes (Tribes) because of the proximity of UA-1 to areas considered culturally sensitive to the Tribes. Further visual assessment of the area identified a pronounced soil mound and discovery of pipe band clamps and insulation material on the ground east of UA-1, this area was later designated as UA-1A along with another area to the west (UA-1B). In 2011, DTSC

met with the former PG&E employee that originally reported the pipe burial activities. He described to DTSC that in the late 1980's he observed the possible burial of 3 to 6 pieces of 20-foot long pipes with asbestos wrap insulation in trenches near the north side of the access road, across from the Old Evaporation Ponds. At the same meeting, this former PG&E employee described the location where an old injection well (TCS-4) was buried in Bat Cave Wash. In 2013, TCS-4 was successfully discovered in the location identified by that former employee using geophysics and trenching.

The old injection well TCS-4 was connected to a horizontal waste line that originated from the former sludge bed treatment unit located in the lower yard of the Topock Compressor Station. This steel waste conveyance pipe was found to be wrapped with asbestos insulation contained in a tar-like mastic. From the TCS-4 well, the waste line can be traced upstream in Bat Cave Wash where it protrudes from the ground encased in concrete at soil sample location SWMU1-25. The pipe is broken at the surface, but can be projected to a similar pipe protruding from the side of the Topock Compressor Station slope. There appears to be a missing segment of insulated pipe along the slope which connected the former sludge bed treatment unit inside the Topock Compressor Station to the pipe leading to TCS-4. Soil samples (2013, 2014 and 2016) collected at and around TCS-4 detected significantly elevated levels of metals, including, but not limited to, total and hexavalent chromium as well as high concentrations of dioxins and furans. Samples of the tarry pipe insulation also detected dioxins/furans and asbestos. Additionally, significant greenish soil staining was observed at and around TCS-4 at a depth of approximately 6 feet during the TCS-4 well decommissioning activities. Soil sample results from SWMU1-25 (where the asbestos wrapped pipe from TCS-4 protrudes out of the ground in Bat Cave Wash) also detected very high concentrations of metals and dioxins/furans. The soil at SWMU1-25 beneath the concrete pad also displayed a distinct green staining.

Over the years, DTSC, DOI and the Tribes have discussed different alternatives to investigating UA-1. The recently implemented soil investigation workplan performed additional geophysical surveys in an attempt to further investigate UA-1, UA-1A and UA-1B. At UA-1A, the geophysical survey identified two total magnetic field anomalies (TMF-1 and TMF-2), a linear anomaly located between TMF-1 and TMF-2, and a lower amplitude total magnetic field anomaly approximately 20-feet west of TMF-1. DTSC's professional geophysicist recommends excavation at the location of the anomalies to ascertain the composition of the buried materials (Attachment).

Based on what appears to be reliable historic accounts from a former PG&E employee, surface evidence of disturbed soil and the presence of asbestos and pipe clamps, recent sampling results showing significant soil contamination associated with asbestos covered pipes in Bat Cave Wash, and results from additional geophysical surveys, DTSC believes that there is a potential for illegally buried pipes containing asbestos and high levels of dioxins/furans on federally-owned land. Additionally, high concentrations of metals could be associated with the pipes. These contaminants may pose an unacceptable risk to current

Ms. Pamela S. Innis
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and future human and ecological receptors. DTSC recommends trenching/potholing at UA-1A to ascertain the nature of the potentially buried material.

On September 9, 2016, DTSC articulated its position to DOI regarding UA-1 and acknowledged that it is on federal land. DTSC will respect the decision of the land owner and the DOI regarding the path forward for this area. DTSC also conveyed that administrative controls be considered as appropriate.

Consistent with our recent discussions, DOI informed PG&E on September 9, 2016 that while there is technical justification to investigate the area, the pipe material is buried and presumably not a current risk to human health and the environment. And that due to the close proximity to the Topock Maze and other archaeological features, additional ground disturbing investigation such as trenching is not appropriate at this time. However, should new information regarding the buried pipe be discovered, the agencies will further evaluate the site. Moreover, the federal agencies will include the information regarding the area in survey plats and land status records, as appropriate.

Again, DTSC looks forward to continuing our strong working relationship on this project. If you have any questions regarding this letter, please feel free to contact me at (714) 484-5423.

Sincerely,



Karen Baker, CHG, CEG
Branch Chief - Geological Services Branch
Department of Toxic Substances Control

Attachment: Discussion Notes: UA-1 – Data Gap Assessment, Geophysical Survey Results, PG&E Topock, California, June 29, 2016

cc: PGE File



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
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Edmund G. Brown Jr.
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MEMORANDUM

TO: Jose Marcos, PG
Engineering Geologist
Geological Services Unit, Cypress
Geological Services Branch

Chris Guerre, CHG
Senior Engineering Geologist
Geological Services Unit, Cypress
Geological Services Branch

FROM: *Stephen C. Sterling*
Stephen C. Sterling, PG 4752, CEG 1840, CHG 651, PGP 952
Senior Engineering Geologist
Geological Services Unit, Sacramento
Geological Services Branch

REVIEWED BY: Lora Jameson, PG *Lora Jameson*
Senior Engineering Geologist
Geological Services Unit, Sacramento
Geological Services Branch

DATE: June 29, 2016

SUBJECT: **DISCUSSION NOTES: UA-1 – DATA GAP ASSESSMENT,
GEOPHYSICAL SURVEY RESULTS, PG&E TOPOCK,
CALIFORNIA**

Project ID: DTSC540015-48 Activity ID: 22120

ACTIVITY REQUESTED

The Department of Toxic Substances Control, Geological Services Unit has reviewed two sets of the *Discussion Notes, UA-1 – Data Gap Assessment, PG&E Topock Soil RFI/RI Work Plan Implementation* (Data Gap Assessment). The Data Gap Assessment versions were prepared by CH2M for the Pacific Gas and Electric Company and are dated December 15, 2015 and February 3, 2016.

The following discussion, comments and recommendations are provided for your information and use. If you have any questions about the enclosed comments and recommendations, please contact me at (916) 255-3739 or stephen.sterling@dtsc.ca.gov.

DOCUMENT SUMMARY

The Data Gap Assessment presents results of a geophysical survey conducted in area UA-1A. The results of the geophysical survey are to be used to determine if additional excavation should be completed to evaluate the source(s) of the detected subsurface geophysical anomalies. The geophysical survey acquired and interpreted the following data: Terrain conductivity, total field magnetometry, metal detection, and ground penetrating radar data.

The Data Gap Assessment, both the December 15, 2015 and February 3, 2016 versions, report two subsurface total magnetic field anomalies in area UA-1A and both Data Gap Assessment versions state, "These anomalies could be associated with buried ferromagnetic pipes or debris." The February 3, 2016 version further states, "... the magnitude of the anomalies are an order of magnitude less than the measurement that would be expected from a grouping of buried pipes" and the sources of the anomalies may be, "... greater than about 6 feet below ground surface ...". The December 15, 2015 version does not include statements regarding the magnitude of anomaly measurements and potential depth of burial for the sources of the anomalies.

Additionally, both versions of the Data Gap Assessment state that a follow-on survey conducted with metal detection and ground-penetrating radar instruments identified a linear anomaly located between the two identified total magnetic field anomalies.

Both the December 15, 2015 and February 3, 2016 versions of the Data Gap Assessment recommend that trenching not be conducted to evaluate the source(s) of the subsurface anomalies.

COMMENTS AND RECOMMENDATIONS

Of the two noted total magnetic field anomalies detected in area UA-1A, the anomaly labeled TMF-1 on draft versions of Plates 4A and 4B in the Data Gap Assessment demonstrates the greatest potential for the presence of buried ferrous metal materials. The width of the anomaly suggests a depth of burial beyond the capability of detection by instruments acquiring terrain conductivity, metal detection, and ground penetrating radar data. This potential deep burial depth would also reduce the magnitude of total magnetic field readings, thus reducing the magnitude of measurements below those expected from a "grouping of buried pipes."

In addition, a lower amplitude total magnetic field anomaly exists to the west of anomaly TMF-1, as indicated in red-colored area located approximately 20 feet west of anomaly TMF-1 on Plate 4B.

Recommendation

GSU recommends excavation of the areas corresponding to total magnetic field anomaly TMF-1, and the anomaly located approximately 20 feet to the west, to ascertain the composition of the buried materials. Upon excavation, if buried materials are determined to pose a potential threat to human health and/or the environment, consideration should be given to excavation of the areas associated with the total magnetic field anomaly TMF-2 and the linear anomaly located between anomalies TMF-1 and TMF-2, as shown on draft versions of Plates 4A and 4B in the Data Gap Assessment.